Cell and Tissue Research

Continuation of Zeitschrift für Zellforschung und mikroskopische Anatomie

Vol. 157 · 1975

Editors

W. Bargmann, Kiel

D. S. Farner, Seattle

A. Oksche, Giessen

B. Scharrer, New York



Springer-Verlag
Berlin · Heidelberg · New York

Cell and Tissue Research

This journal was founded in 1924 as the Zeitschrift für Zellen- und Gewebelehre, from Vol. 2 (1925) it was published with the subtitle: Continuation of the Schultze-Waldever-Hertwig Archiv für mikroskopische Anatomie. Zeitschrift für Zellforschung und mikroskopische Anatomie (Vols. 1-20) (1934) as: Zeitschrift für wissenschaftliche Biologie (Abteilung B) edited by R. Goldschmidt, W. von Möllendorff, H. Bauer, J. Seiler. Vols. 2-28 (1938) edited by R. Goldschmidt and W. von Möllendorff. Vols. 29-33 (1944) as: Zeitschrift für Zellforschung und mikroskopische Anatomie, Abteilung A, Allgemeine Zellforschung und mikroskopische Anatomie, edited by W. von Möllendorff and J. Seiler, from Vol. 34 without the subtitle, Abteilung A, Allgemeine Zellforschung und mikroskopische Anatomie. From Vol. 36 (1951) edited by W. Bargmann, J. Seiler; from Vol. 53 (1960) edited by W. Bargmann, B. Scharrer, J. Seiler; from Vol. 83 (1967) edited by W. Bargmann, D. S. Farner, A. Oksche, B. Scharrer, J. Seiler; from Vol. 125 (1972) edited by W. Bargmann, D. S. Farner, F. Knowles, A. Oksche, B. Scharrer. Beginning with Vol. 125 (1972) with the subtitle Cell and Tissue Research and beginning with Vol. 148 (1974) under the title Cell and Tissue Research and the subtitle Continuation of Zeitschrift für Zellforschung und mikroskopische Anatomie.

Published: Vols. 34—35 (1948—1950) Springer, Wien, from Vol. 36 Springer, Berlin.

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher.

The use of registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Springer-Verlag, Berlin · Heidelberg · New York

Printers: Universitätsdruckerei H. Stürtz AG, Würzburg

Printed in Germany — © by Springer-Verlag Berlin-Heidelberg 1975

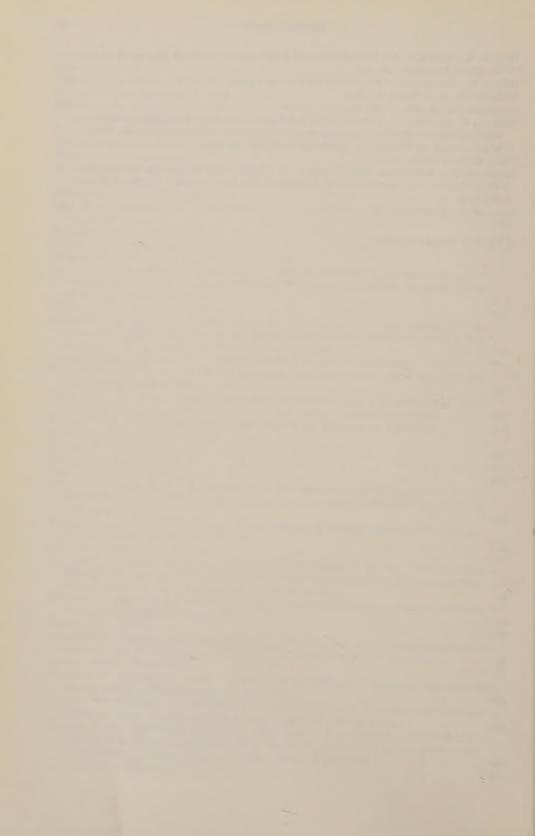
Inhalt/Contents

Abel, J. H., Jr., s. Haack, D. W., et al	125
Barrett, J. M., Heidger, P. M., Jr.: Microbodies of the Rat Renal Proximal Tubule:	
Ultrastructural and Cytochemical Investigations	283
Beamish, F. W. H., s. Percy, R., et al	141
Bellairs, R., Harkness, M. L. R., Harkness, R. D.: The Structure of the Tapetum of the	
Eye of the Sheep	73
Benjamin, M.: The Adenohypophysis of the Flounder, Pleuronectes flesus, and the	
Minnow, Phoxinus phoxinus	391
Beuerman, R. W., s. Biedenbach, M. A., et al	341
Biedenbach, M. A., Beuerman, R. W., Brown, A. C.: Graphic-digitizer Analysis of	
Axon Spectra in Ethmoidal and Lingual Branches of the Trigeminal Nerve	341
Braak, E.: On the Fine Structure of the External Glial Layer in the Isocortex of Man	367
Brown, A. C., s. Biedenbach, M. A., et al	3/1
Chien, P., s. Koopowitz, H	
Chen, I-Li., Yates, R. D.: The Fine Structure and Phosphatase Cytochemistry of the	201
	997
Golgi Complex and Associated Structures in the Sertoli Cells of Syrian Hamsters	221
Conte, E. Del: Correlated Changes in the Structure of the Anterior Pituitary Gland,	400
Testes and Interrenal Tissue during Sexual Maturation of Male Lizards	493
Dellmann, HD., s. Stoeckel, M. E., et al	307
Delorme, P., Gayet, J., Grignon, G.: Diffusion of Horseradish Peroxidase Perfused	
through the Lateral Ventricle of the Chick Telencephalon	535
Dierickx, K., s. Mey, J. De, et al	517
Emery, D. G.: Ciliated Sensory Neurons in the Lip of the Squid Lolliguncula brevis	
Blainville	323
Emery, D. G.: Ciliated Sensory Cells and Associated Neurons in the Lip of Octopus	
joubini Robson	331
Fisher, S. K., s. Robles, L. J	217
Fremberg, M., Meurling, P.: Catecholamine Fluorescence in the Pituitary of the Eel,	
Anguilla anguilla, with Special Reference to Its Variation during Background	
Adaptation	53
Gayet, J., s. Delorme, P., et al.	535
Genbačev, O., Pantić, V.: Pituitary Cell Activities in Gonadectomized Rats Treated	
with Estrogen	273
Gianfelici de Reyners, E., s. Reyners, H., et al.	93
Goodman, L. J., Patterson, J. A., Mobbs, P. G.: The Projection of Ocellar Neurons	00
Goodman, L. J., Patterson, J. A., Moobs, F. G.: The Projection of Ocenar Neurons	167
within the Brain of the Locust, Schistocerca gregaria	165
Gorbman, A., s. Tsuneki, K.	100
Gresik, E. W., MacRae, E. K.: The Postnatal Development of the Sexually Dimorphic	411
Duct System and of Amylase Activity in the Submandibular Glands of Mice	411
Grignon, G., s. Delorme, P., et al	535
Haack, D. W., Abel, J. H., Jr., Jaenke, R. S.: Effects of Hypoxia on the Distribution of	100
Calcium in Arterial Smooth Muscle Cells of Rats and Swine.	125
Harkness, M. L. R., s. Bellairs, R., et al	_ 73
Harkness, R. D., s. Bellairs, R., et al	73
Harris J. F. Hunt S: The Fine Structure of the Epidermis of Two Species of Salmonid	
Fish the Atlantic Salmon (Salmo salar L.) and the Brown Trout (Salmo trutta L.).	
I General Organization and Filament-Containing Cells	553
Heersche J N M s Scherft, J. P	353
Holdcor P M Jr & Barrett J M	283
Hindelang-Gertner, C., s. Stoeckel, M. E., et al.	307
Timuciang Gorunot, C., B. Docomor, Land	

	OFF
	255
Hunt, S., s. Harris, J. E.	999
Jadin, J. M., s. Reyners, H., et al.	195
Jaenke, R. S., s. Haack, D. W., et al.	120
Koopowitz, H., Chien, P.: Ultrastructure of Nerve Plexus in Flatworms. II. Sites of	207
Synaptic Interactions	201
Korneliussen, H., Nicolaysen, K.: Distribution and Dimension of the T-System in	1
Different Muscle Fiber Types in the Atlantic Hagfish (Myxine glutinosa, L.)	
Korohoda, W., s. Stockem, W	041
Lange, W.: Cell Number and Cell Density in the Cerebellar Cortex of Man and Some	115
Other Mammals	141
Lyke, E. B., Robson, E. A.: Spermatogenesis in Anthozoa: Differentiation of the	111
Spermatid	185
MacRae, E. K., s. Gresik, E. W.	411
Maisin, J. R., s. Gresik, E. W	93
Maisin, J. K., S. Reyners, H., & & Meurling, P., s. Fremberg, M	53
Mey, J. De, Dierickx, K., Vandesande, F.: Immunohistochemical Demonstration of	00
Neurophysin I- and Neurophysin II-Containing Nerve Fibres in the External Region	
of the Bovine Median Eminence	517
Mobbs, P. G., s. Goodman, L. J., et al.	
Monis, B., Rovasio, R. A., Valentich, M. A.: Ultrastructural Characterization by	10.
Ruthenium Red of the Surface of the Fat Globule Membrane of Human and Rat Milk	
with Data on Carbohydrates of Fractions of Rat Milk	17
Morgan, M., Pack, R. J., Howe, A.: Nerve Endings in Rat Carotid Body	
Naik, D. V.: Immunoreactive LH-RH Neurons in the Hypothalamus Identified by Light	
and Fluorescent Microscopy	423
Naik, D. V.: Immuno-Electron Microscopic Localization of Luteinizing Hormone-	
Releasing Hormone in the Arcuate Nuclei and Median Eminence of the Rat	437
Nakao, T.: The Fine Structure and Innervation of Gill Lamellae in Anodonta	
Nicolaysen, K., s. Korneliussen, H.	
Pack, R. J., s. Morgan, M., et al	255
Pantić, V., s. Genbačev, O	273
Patterson, J. A., s. Goodman, L. J., et al	467
Percy, R., Leatherland, J. F., Beamish, F. W. H.: Structure and Ultrastructure of the	
Pituitary Gland in the Sea Lamprey, Petromyzon marinus at Different Stages in Its	
Life Cycle	141
Popham, J. D.: The Fine Structure of the Oocyte of Bankia australis (Teredinidae,	
Bivalvia) before and after Fertilization	521
Porte, A., s. Stoeckel, M. E., et al	307
Reyners, H., Gianfelici de Reyners, E., Jadin, J. M., Maisin, J. R.: An Ultrastructural	
Quantitative Method for the Evaluation of the Permeability to Horseradish Per-	
oxidase of Cerebral Cortex Endothelial Cells of the Rat	93
Robles, L. J., Fisher, S. K.: Acid Phosphatase Localization in Neurons of Bulla gouldiana	
(Gastropoda: Opisthobranchia)	217
Robson, E. A., s. Lyke, E. B	185
Romijn, H. J.: Structure and Innervation of the Pineal Gland of the Rabbit Ornetologue	
cuniculus (L.). III. An Electron Microscopic Investigation of the Innervation	25
Rovasio, R. A., s. Monis, B., et al	17
Scherft, J. P., Heersche, J. N. M.: Accumulation of Collagen-Containing Vacuoles in	
Osteoblasts after Administration of Colchicine	353
Stockem, W., Korohoda, W.: Effects of Induced Pinocytotic Activity and Extreme	
Temperatures on the Morphology of Golgi Bodies in Amoeba proteus	541
Stoeckel, M. E., Hindelang-Gertner, C., Dellmann, HD., Porte, A., Stutinsky F.	
Subcellular Localization of Calcium in the Mouse Hypophysis, I Calcium Distribution	
in the Adeno- and Neurohypophysis under Normal Conditions	307
Stutinsky, F., s. Stoeckel, M. E., et al.	307

Tsuneki, K., Gorbman, A.: Ultrastructure of Pars nervosa and Pars intermedia of the	
Lamprey, Lampetra tridentata	165
Tucker, R.: The Surface of the Pecten oculi in the Pigeon	457
Valentich, M. A., s. Monis, B., et al	17
Vandesande, F., s. Mey, J. De, et al	517
Watkins, W. B.: Presence of Neurophysin and Vasopressin in the Hypothalamic Magno-	
cellular Nuclei of Rats Homozygous and Heterozygous for Diabetes insipidus (Bratt-	
leboro Strain) as Revealed by Immunoperoxidase Histology	101
Yates, R. D., s. Chen, I-Li	227
Youson, J. H.: Absorption and Transport of Ferritin and Exogenous Horseradish	
Peroxidase in the Opisthonephric Kidney of the Sea Lamprey. II. The Tubular	
Nephron	503
Erratum	566

Indexed in Current Contents



Instructions to Authors

1. Manuscripts should be submitted in duplicate, typed double-spaced, with wide margins and on one side of the paper only. They should be carefully prepared in the style of this journal and checked before being submitted. Typing errors should be corrected legibly.

The material should be arranged under the following headings: Introduction, Material and Methods, Results, Discussion and References. The text should be concise and consistent as to spelling, abbreviations, etc. Pages should be consecutively numbered. The desired position of figures and tables should be marked in the margin. Changes in the proofs should be kept to a minimum; a charge will be made for changes introduced after the manuscript has been set in type.

Papers must be written in English, thus ensuring the widest possible readership. Authors not wholly familiar with English usage are advised to seek the help of an English-speaking colleague. Editorial assistance with the language is available when needed. However, correct language is the responsibility of the author(s).

Manuscripts which have been heavily corrected by the copy editor will be returned to the author for retyping.

Brief accounts of particularly interesting results will be printed out of turn as "Short Communications". They should not exceed 2 or at the most 3 printed pages including a table or figure, should this be necessary. The Editors reserve the right to decide what constitutes a "Short Communication".

- 2. Each paper should be preceded by a brief summary of not more than 200 words. Authors may append a German or French summary to their manuscripts if they wish.
- 3. Key words. Immediately following the summary not more than 5 English key words should be supplied for subject indexing. Key words should be taken from the Index Medicus (Medical Subject Headings) or, failing this, composed on the same principles.
- 4. On the first page of the manuscript the author should furnish the following information: Title, Author(s), Department, Running head (condensed title), not exceeding 72 letters and spaces, and Address to which proofs should be sent.
- 5. Dedications and short acknowledgements to persons and organizations should be inserted as footnotes on the first page. Footnotes which do not belong to the head of the article should be numbered consecutively.
- 6. Small print. Text of secondary importance, including Material and Methods, should appear in small print and must be marked as such.
- 7. Literature references. In the text, names of authors should be followed by the year of publication (in parentheses). Where there are more than two authors, only the first is named, followed by "et al". All papers mentioned in the text, and only these, should be cited in the bibliography.

In the bibliography the following information should be provided for **journal articles**: names and initials of all authors, complete title of paper, name of journal (abbreviated in accord with World Medical Periodicals), number of volume, first and last pages, and year of publication.

Books are cited by listing the authors' names, full title, edition, place of publication, publisher and year.

The bibliography, to be placed at the end of the paper, should be in alphabetical order. Several publications by the same author or group of authors should be listed in chronological order; those that appear in the same year should be distinguished by the suffixes a, b, c, etc.

8. Illustrations. All figures including graphs are to be numbered consecutively as text figures (arabic numerals). They must be submitted in finished form on separate sheets. All should have descriptive legends. These must be typed (double-spaced) in numerical order and placed at the end of the manuscript. As with the text, a duplicate set of illustrations is necessary to facilitate editorial processing.

The number and size of the illustrations must be kept to the minimum required for clarification of the text. Previously published figures cannot be accepted. Explanations of figures furnished as legends should not be repeated in the text. Numerical data given in graphs or tables must not duplicate each other. As a rule, requests for color reproductions cannot be approved unless the author(s) bear the costs. The journal is not subsidized in any way. Therefore, when papers have an excessive number of illustrations (even though the editors agree that they are essential) it is necessary to ask the author, or his institution, to make a contribution toward the cost of reproduction.

From the technical point of view, there are two types of illustrations, line cuts (black and white, with no variation in tone or shading) and halftones (photographs or drawing with variations in shading). Halftones should be submitted only if line cuts (with stippling, cross-hatching, etc.) cannot adequately convey the information intended.

- a) Line Cuts. Line drawings and graphs should be drawn in Indian ink in clean, uniform lines on smooth white paper or Bristol board. Lettering should be sufficiently large so that it will be clearly legible after any reduction that might be necessary to conform to the format of the journal.
- b) Halftones. Micrographs must be clean, glossy prints in sharp focus and with strong contrast. They must be trimmed at precise right angles. Only one of the two sets of illustrations should be mounted for use by the engraver. It is not necessary to mount the illustrations on cardboard or Bristol board. Careful mounting on letter-size paper is quite adequate. After reduction illustrations must not exceed the printed area of one page. Smaller figures should be grouped in plates with spaces of not more than about 1 mm between the individual figures. Halftones should be trimmed so as to eliminate all unnecessary parts.

The lettering of electron micrographs with Letraset (instant lettering) is recommended; authors should take into consideration reductions called for during the printing process. If the labelling with Letraset is not possible it is done by the publisher in a size adjusted to the scale of reproduction. In this case lettering must be placed on a transparent cover sheet. This overlay may also show any edges which should be trimmed off. Lead-lines or arrows may also be drawn on the overlay, an end point should be marked by pricking the original with a fine pin.

The author's name, and instructions regarding the desired linear reduction or magnification should be indicated on the reverse side of the illustration in soft lead pencil. It must be emphasized that the maximum area available for the reproduction of a figure (or an array) is $122 \times 195 \text{ mm}$ ($4^3/_4 \times 7^1/_2$ inches).

- 9. Tables should be numbered consecutively in arabic numerals. They should be typed on separate sheets.
- 10. Mailing. Manuscripts and illustrations should be well packed in order to avoid damage in transit.